

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/510,945
Attorney Docket No. Q84019

REMARKS

I. Introduction

Claims 1-5 have been examined and are rejected. Specifically, claims 1-4 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent Publication No. 2001/0005320 to Ueda et al. (hereinafter “Ueda”), in view of U.S. Patent No. 6,111,767 to Handleman (hereinafter “Handleman”). Claim 5 is rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

II. Allowable Subject Matter

Claim 5 would be allowed, if rewritten or amended to overcome the § 112, second paragraph, rejection thereof (Office Action: page 3). As the § 112, second paragraph, rejection is overcome, for at least the reasons set forth below, it is respectfully submitted that claim 5 is in condition for immediate allowance.

III. Claim Rejections – 35 U.S.C. § 112, Second Paragraph

As noted above, claim 5 stands rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. According to the Examiner:

In the last paragraph of claim 5, it cannot be determined what the claim language implies, particularly the last five lines of the claim

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starting with "representing electric characteristic..." The relationship between "sampling period" and the rest of the equation cannot be understood. The term "sampling period" is not clearly defined by the specification. The examiner interprets the equation in the last paragraph of claim 5 to correspond to page 12, equations 2 and 4 of the specification.

As an initial matter, claim 5 is amended to further clarify the features recited therein. For example, the last paragraph of claim 5 now recites that "the power-saving effect is calculated by multiplying a difference between the second instantaneous power consumption under the commercial operation without the inverter and the first instantaneous power consumption under the general operation with the inverter, by a ratio between the power consumption under the operation with the inverter for the sampling period and the first instantaneous power consumption under the general operation of the inverter."

As an example, and not by way of limitation, a difference between a power consumption under a general damper control for a commercial operation (P2 or P3) and a power consumption under a general operation with an inverter (P1) is illustrated in Applicant's Fig. 2 (discharge side) and Fig. 3 (intake side). Accordingly, for this non-limiting example, a ratio between (a) the power consumption under the operation with the inverter for a sampling period (P'), *i.e.*, the power consumption calculated by the power-consumption computing unit "based on a voltage obtained by an output-voltage computing unit and a current obtained by a current detecting unit" for the sampling period and (b) the power consumption under a general operation with an inverter (P1), is multiplied with the aforementioned difference to obtain the power-saving effect.

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Furthermore, it is respectfully submitted that the recited sampling period is sufficiently described in Applicant's specification. First of all, related sampling is described in the Background section of Applicant's specification (*see* Applicant's specification: page 2, lines 11-20). Additionally, Applicant's invention describes sampling in the context of the disclosed exemplary embodiments (*see* Applicant's specification: page 13, line 21 to page 14, line 5).

In view of the above, it is respectfully submitted that claim 5 is sufficiently definite under § 112, second paragraph.

IV. Claim Rejections – 35 U.S.C. § 103(a)

As noted above, claims 1-4 stand rejected under § 103(a) as allegedly being unpatentable over Ueda in view of Handleman. As an initial matter, claims 1-4 are amended to further clarify the features recited therein.

Claim 1 recites, *inter alia*, “a power-saving-effect generating unit that generates an instantaneous power-saving effect, at the time of a general operation of the inverter as compared to a commercial operation without the inverter, from the instantaneous power consumption at the time of a general operation of the inverter obtained from the power-consumption computing unit and data resulting from a comparison of a first instantaneous power consumption at the time of the general operation of the inverter and a second instantaneous power consumption at the time of the commercial operation without the inverter.” The Examiner alleges that Ueda discloses these features as ¶¶ 149 and 150.

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To the contrary, Ueda merely discloses the general efficiency of a linear motor, expressed as a ratio between the linear compressor output (*i.e.*, linear motor output) and the average output energy of the linear motor. The efficiency calculation of Ueda is a measure of efficiency and is not a power-saving effect, let alone a power-saving effect resulting from introduction of an inverter. Consequently, Ueda fails to disclose generating a power-saving effect based on data resulting from a comparison of power consumption at a time of a general operation with an inverter and power consumption at a time of a commercial operation without an inverter, as recited in claim 1. Handleman fails to make up for these deficiencies of Ueda.

Accordingly, claim 1 is patentable over the proposed combination of Ueda in view of Handleman. Consequently, claims 2-4 are patentable over Ueda and Handleman, at least by virtue of their dependency.

V. New Claim 6

Applicant adds new claim 6 to obtain an expanded scope or protection, and it is respectfully submitted that claim 6 does not introduce any new matter.

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VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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